

REMARKS UNDER 37 CFR § 1.111

Formal Matters

Claims 1-13 and 17-20 are pending after entry of the amendments set forth herein. Claims 14-16 and 21-34 have been canceled above, without prejudice to the possibility of filing one or more continuing applications directed to the subject matter recited therein.

Claims 1-13 and 17-20 were examined. Claims 1-13 and 17-20 were rejected.

Applicant respectfully requests reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

The Telephone Interview

Applicant wishes to extend his appreciation to the Examiner for the courtesy provided to Applicant's representative during the telephone interview of November 15, 2006. During the Interview, it was agreed that above amendments overcome the rejections under 35 U.S.C. Section 112, second paragraph, parts (a), (b), (c) and (e). With regard to part (d), the Examiner indicated that he would have to further consider the claim amendments. It was further agreed that the rejection of claims 1-13 and 17-20 under 35 U.S.C. Section 112, first paragraph is to be withdrawn in view of the identification of supporting disclosure in the specification at page 11, lines 1-1 and page 16, lines 3-7, for example. With regard to the rejection of claims 1-13 under 35 U.S.C. Section 102(b) as being anticipated by Singh et al., "Gene expression correlates of clinical prostate cancer behavior", Cancer Cell, Vol. 1, March 2002, Applicant's representative noted that Singh et al. does not disclose a plurality of samples taken from a heterogeneous tissue region, wherein the heterogeneous tissue region includes a first portion having at least first and second types of tissue, bordered by a second portion, said second portion considered to be devoid of the second type of tissue, wherein the plurality of samples have been taken from successive locations along a determined profile of locations through the heterogeneous tissue region. The Examiner indicated that he would need to further consider this argument.

This account is believed to be a complete and accurate summary of the interview as required by 37 C.F.R. § 1.133. If the Examiner believes that this summary is inaccurate or incomplete, Applicant

respectfully requests that the Examiner point out any deficiencies in his next communication so that Applicant can amend or supplement the interview summary.

The Office Action

In the Official Action of August 28, 2006, the Examiner objected to the specification as not capitalizing all occurrences of PCURVE and T-CHART. In response thereto, Applicant has amended the specification above to make all occurrences of these terms appear in capital letters. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the objection to the specification as being no longer appropriate.

Claims Rejected Under 35 U.S.C. Section 112, Second Paragraph

Claims 1-13 and 17-20 were rejected under 35 U.S.C. Section 112, second paragraph as being indefinite. With regard to part (a), Applicant agrees with the Examiner interpretation of rank order as the sorting of objects in ascending or descending order. However, Applicant note that claim 1 specifies that this sorting is based on proximity to the trend profile.

With regard to part (b), Applicant respectfully submits that this portion is now moot in view of the above claim amendments, as "cell activity" is no longer recited in claim 1.

With regard to part (c), Applicant respectfully submits that this portion is now moot in view of the above claim amendments, as "cell properties" is no longer recited in claim 1.

With regard to part (d) Applicant has amended claims 1, 17 and 19 in an effort to clarify that a characteristic signature is formed from only one property that is measured for a plurality of samples.

With regard to part (e), Applicant respectfully submits that this portion is now moot in view of the above claim amendments, as "properties" and "activities" are no longer both recited in claim 1.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-13 and 17-20 under 35 U.S.C. Section 112, second paragraph as being indefinite, as being no longer appropriate.

Claims Rejected Under 35 U.S.C. Section 112, First Paragraph

Claims 1-13 and 17-20 were rejected under 35 U.S.C. Section 112, first paragraph as being enabling only for gene expression and not for any other cell property and for failing to comply with the written description requirement. In view of the above amendment of claim 1 so that it no longer recites “cell property” and in view of the specification which discloses that other types of analysis or quantification can be performed (e.g., page 11, lines 1-5) and that the invention can be applied to other unknown heterogeneous mixtures of substances (e.g., see page 16, lines 3-7 of the specification), and in view of the Examiner’s agreement during the telephone interview that this ground of rejection is overcome, it is respectfully submitted that the present invention, as claimed, is enabled and adequately described. Accordingly, the Examiner is respectfully requested to reconsider and withdraw all grounds of rejection of claims 1-13 and 17-20 under 35 U.S.C. Section 112, first paragraph, as being inappropriate.

Claims Rejected Under 35 U.S.C. Section 102(b) (Singh et al.)

Claims 1-13 were rejected under 35 U.S.C. Section 102(b) as being anticipated by Singh et al. (“Gene expression correlates of clinical prostate cancer behavior”, Cancer Cell, Vol. 1, March 2002). As noted during the telephonic interview of November 15, 2006, Applicant respectfully submits that Singh et al. fails to disclose forming a plurality of characteristic signatures from measurements taken from samples taken from successive locations along a determined profile of locations through the heterogeneous tissue.

For at least the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-13 under 35 U.S.C. Section 102(b) as being anticipated by Singh et al. (“Gene expression correlates of clinical prostate cancer behavior”, Cancer Cell, Vol. 1, March 2002), as being clearly inappropriate.

Claims Rejected Under 35 U.S.C. Section 102(e) (Crosby et al.)

Claims 1-10, 12-13 and 17-20 were rejected under 35 U.S.C. Section 102(e) as being anticipated by Crosby et al. (US Patent Application Publication No. 2003/0190689). The Examiner asserted the Crosby et al. discloses a method of identifying the most relevant biomarkers of disease progression by forming a plurality of characteristic signatures of plurality of cell properties measured from a plurality of

samples taken from a heterogeneous tissue region that are in the form of multiple sequential tissue slices (“cellular assays”) at paragraph [0080] on page 9. Although paragraph [0080] of Crosby et al. discloses that rapid analysis of multiple sequential tissue slices or cells in parallel may be performed, Applicant found no disclosure or suggestion in Crosby et al. of forming characteristic signatures wherein each characteristic signature is formed from values for a particular property measured from each of the samples. Rather, Crosby et al. discloses at paragraph [0023] on page 3 that: (a) cellular samples are obtained from a plurality of patients having a disease, (b) a panel of phospho-specific antibodies is used in a cellular assay to detect the phosphorylation statuses of the signal transduction proteins in the cellular samples, and (c) correlations are determined between the phosphorylation statuses of the signal transduction proteins detected in step (b) and responsiveness to the therapeutic composition, wherein one or more significant correlations identifies one or more signal transduction proteins as biomarkers of patient responsiveness to the therapeutic composition. There is no disclosure or suggestion of forming characteristic signatures across all patient samples in this description, as the samples are treated independently in performing correlation analysis.

For at least the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-10, 12-13 and 17-20 under 35 U.S.C. Section 102(e) as being anticipated by Crosby et al. (US Patent Application Publication No. 2003/0190689), as being clearly inappropriate.

Conclusion

Applicant submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

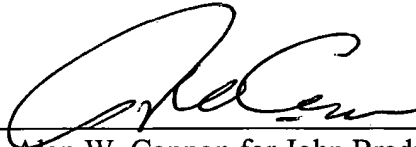
The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10030215-1.

Respectfully submitted,

Date: _____

11/16/08

By: _____



Alan W. Cannon for John Brady
Registration No. 34,977

John Brady
Agilent Technologies, Inc.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599
Telephone: (408) 553-3584
Facsimile: (408) 553-2365